Notice of Allowability	Application No.	Applicant(s)	
	09/806,974	MOLIERE, THOMAS	
	Examiner	Art Unit	
	Marie C. Ubiles	2642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *7/18/2001*.

2. ☒ The allowed claim(s) is/are *13-25*.

3. ☒ The drawings filed on *7/18/2001* are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

 * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Marie C. Ubiles
Patent Examiner
703-305-0684

DETAILED ACTION

Allowable Subject Matter

1. Claims 13-25 are allowed.

2. The following is an examiner's statement of reasons for allowance:

Claim 13 recites a "transmission output stage push-pull amplifier" comprising the steps of generating "a transmit signal via both the first and second outputs... at a lower frequency" and "the transmit signal... in single-ended operation... via only the first output... at a higher frequency."

No prior art was found teaching individually, or suggesting in combination, the combination of [redacted], specifically, the transmit signal being generated by the push-pull amplifier via both the first and second outputs during operation at a lower frequency, and in single-ended operation via only the first output during operation at a higher frequency.

Adar (US 5,774,017) discloses a transmission output stage for a multifrequency mobile telephone (i.e. a dual-band amplifier for wireless communications)(See Abstract) comprising a push-pull amplifier (as read on the "GaAs MMIC amplifier) having first and second outputs (See elements 178-180, Fig. 1).

Lemley (US 6,029,054) discloses a push-pull amplifier with input and output phase shifts of 180 degrees between legs (See Col. 2, lines 31-37).

Wright (US 4,422,047) discloses the use of a push-pull amplifier for amplification of a signal to a preselected level (See Col. 4, lines 28-33).

However, Adar's, Lemley's and Wright's systems only transmit through an output at a time, or in single-ended operation for either low and high frequencies.

Mohwinkel (US 5,821,815) discloses a an amplifier driven by a single-ended signal and having a push-pull amplifier in the output (See Col. 4, lines 47-55),

However, Mohwinkel's system does not control the single-ended operation based on the frequency levels of transmitted signals.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie C. Ubiles whose telephone number is (703) 305-0684. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marie C. Ubiles
November 23, 2004.

AHMAD F. MATAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600